

Liquivision Charger Kit User Manual

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► IMPORTANT NOTICES

Contents of Charger Kit

The Liquivision Charger Kit (“Charger Kit”) includes an AC Adapter, a Multifunction Attachment and a USB cable. Together, they can be used to charge the Liquivision X1 Dive Computer (“X1”), or the Liquivision X-Link Rebreather Interface (“X-Link”). The Multifunction Attachment can also be used to connect the X1 to your personal computer by means of a USB cable, and to download software onto the X1, or upload dive log data onto your personal computer.

User Agreement and Warranty

Use of your Charger Kit is subject to the User Agreement and Warranty (“Agreement”) included in the Charger Kit package, and available at the Liquivision website: www.liquivision.ca.

You must read the entire Agreement before using your Charger Kit. If you do not agree with any term of the Agreement, you must not use the Charger Kit, and you may return the Charger Kit to Liquivision or the authorized Liquivision dealer from which you purchased the Charger Kit for a full refund within 30 days after your date of purchase.

If you use the Charger Kit, you are deemed to have agreed to the User Agreement and Warranty.

User Manual

The User Manual is available at the Liquivision website: www.liquivision.ca.

You must read this entire Charger Kit User Manual before charging your X1 or X-Link, or before connecting your X1 to your computer. Incorrect use of the Charger Kit will invalidate your Warranty and can cause permanent damage to the X1 or X-Link.

Important Rules

Here are some important rules you must follow while using the Charger Kit. Not abiding by these rules will void your Warranty. Please consult the Agreement for details (section 4.3 “Warranty Limitations and Exclusions”).

- The contents of the Charger Kit are NOT designed for underwater use. Never submerge the Multifunction Attachment or the AC adapter, and never dive with the Multifunction Attachment or AC adapter connected to the X1 or X-Link. Doing so will damage these accessories and/or the X1 or X-Link, and will void the Warranty.
- Do not recharge the X1 and/or X-Link in direct sunlight, or allow the temperature of the X1 to exceed 45°C (113°F) during recharging.
- Do not attempt to open, modify or repair the contents of the Charger Kit yourself. Contact your dealer for assistance.

Important Notice on Charging

When you want to charge your X1 or X-Link, FIRST you must connect the X1 or X-Link to the Multifunction Attachment, THEN you can connect the attachment to the AC Adapter and into a power supply.

When you want to stop charging your X1 or X-Link, FIRST disconnect the unit from power, THEN disconnect the Multifunction attachment from the X1 or X-Link.

If you do not follow these rules, your X1 or X-Link may not function properly and you may need to reset it.

Liquivision Limitation of Liability

The Agreement includes exclusions and limitations of Liquivision's liability to you. These exclusions and limitations include, but are not limited to, the following:

YOU AGREE THAT YOU UNDERSTAND AND ACCEPT ALL RISKS ASSOCIATED WITH DIVING, AND THAT LIQUIVISION IS NOT LIABLE TO YOU OR ANY OTHER PERSON, INCLUDING YOUR HEIRS, EXECUTORS OR PERSONAL REPRESENTATIVES, FOR ANY LOSS, DAMAGE, COST, EXPENSE OR CLAIM ARISING OUT OF, CAUSED BY OR RELATING TO YOUR PERSONAL INJURY OR DEATH WHILE DIVING, EVEN IF YOUR PERSONAL INJURY OR DEATH IS CAUSED, IN WHOLE OR IN PART AND DIRECTLY OR INDIRECTLY, BY THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE (AS DEFINED BELOW) OR THE DRIVER SOFTWARE PROVIDED WITH THE X1 (THE "DRIVER") OR YOUR USE OF THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE OR THE DRIVER, AND REGARDLESS OF WHETHER OR NOT THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE OR THE DRIVER FUNCTIONED PROPERLY OR WAS DEFECTIVE IN ANY WAY.

YOU HEREBY IRREVOCABLY WAIVE AND RELEASE LIQUIVISION FROM ANY LIABILITY OR OBLIGATION TO YOU OR YOUR HEIRS, EXECUTORS OR PERSONAL REPRESENTATIVES FOR ANY LOSS, DAMAGE, COST, EXPENSE OR CLAIM ARISING OUT OF, CAUSED BY OR RELATING TO YOUR PERSONAL INJURY OR DEATH WHILE DIVING, EVEN IF YOUR PERSONAL INJURY OR DEATH IS CAUSED, IN WHOLE OR IN PART AND DIRECTLY OR INDIRECTLY, BY THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE OR THE DRIVER OR YOUR USE OF THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE OR THE DRIVER, AND REGARDLESS OF WHETHER OR NOT THE X1, THE X-LINK, THE CHARGER KIT, ANY 3RD PARTY SOFTWARE OR THE DRIVER FUNCTIONED PROPERLY OR WAS DEFECTIVE IN ANY WAY.

You must read the Agreement for all limitations and exclusions of Liquivision's liability to you.

► PARTS LIST

In your Charger Kit package, you will find the following items:



- Multifunction Attachment



- AC Adapter



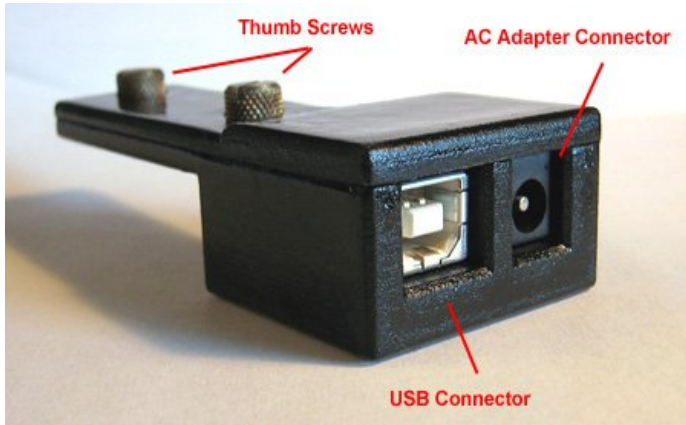
- Plug Adapters



- USB Cable

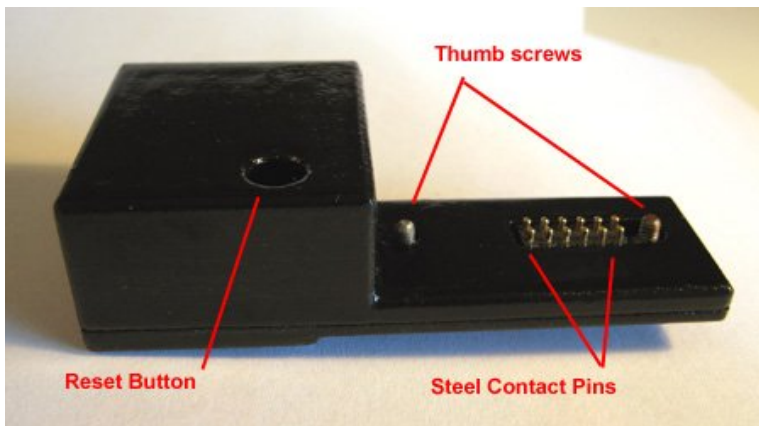
► ANATOMY OF THE CHARGER KIT

Multifunction Attachment



The Multifunction Attachment (called the “Attachment” below for simplicity’s sake) allows for a variety of functions, including:

- Charging of the X1 battery via the AC Adapter
- Connection of the X1 via USB cable to a PC, to upload software to the X1
- Download of the X1 dive data to a PC
- Resetting of the X1 with the reset button



AC Adapter

The AC Adapter allows you to connect the X1 to a wall outlet. The AC adapter autoswitches between different international voltages (90-260V AC).

Plug Adapters

Four plug adapters are included with the X1 that allow compatibility of the AC Adapter with wall sockets in most countries.

USB Cable

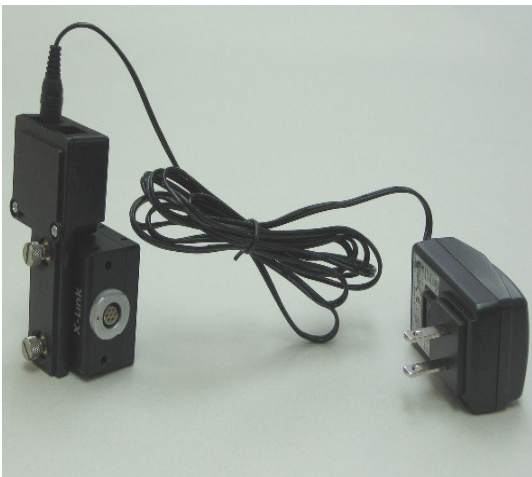
The USB cable allows you to connect your PC to the X1 via the Multifunction Attachment.

► PUTTING IT ALL TOGETHER

X1 Connected to Multifunction Attachment and AC Adapter for charging
(please see detailed instructions in next section)



X-Link Connected to Multifunction Attachment and AC Adapter for charging
(please see detailed instructions in next section)



► CHARGING THE X1

We recommend charging your X1 fully once you have received it. Your X1 may already have a partial charge or be completely discharged.

*****WARNING:** It is very important that you follow these steps for charging your X1. If you connect or disconnect your X1 in a different sequence, your X1 could malfunction and require a hardware reset. ***

Connecting the Attachment and AC Adapter for charging

1. Make sure the AC Adapter is NOT connected to the Attachment:



2. Connect the Attachment to the X1 by using thumb screws:



3. Screw each thumb screw a little at a time evenly to maintain proper alignment.

- Once the Attachment and X1 are connected, you can connect the AC Adapter to the Attachment and the wall power source. Use the correct plug adapter if needed.



- Your X1 should automatically start charging once the Attachment and AC Adapter are connected.
- The display will show a “charging status” – how it appears will depend on the 3rd party software you have installed on the X1.
- Charging should take approximately 4 hours.

Disconnecting AC Adapter after charging

- When you disconnect your X1, FIRST remove the power supply from the Attachment, THEN remove the Attachment from the X1.



Battery Life

Battery life for the X1 will vary depending on 3rd party software. Battery power conservation can be achieved in a variety of ways, including OLED display brightness, sampling rate and variable demands on X1 hardware. Consult your 3rd party software user manual for more information.

In general, the X1 lasts for 20-30 hours in dive mode and anywhere from several days to several weeks in sleep mode on a single charge.

► CHARGING THE X-LINK



Battery Life

Battery life for the X-Link will vary depending on 3rd party software. The X-Link will generally last for about 150 hours of dive time, or 7-10 days in sleep mode.

We recommend charging your X-Link fully, once you have received it. Your X-Link may already have a partial charge or be completely discharged.

Connecting the Attachment and AC Adapter for charging

There are two ways to re-charge the X-Link:

<u>A) Stand-alone recharging</u>	<u>B) Mated recharging</u> Re-charging the X-Link while the it is connected to the X1
	


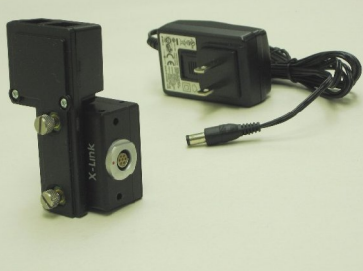

The advantage of stand-alone recharging is that it is quick and easy (no need to set up the X1 Dive Computer in any way). However, you will not know when charging is finished.

The advantage of mated recharging is that some software packages can report to you the progress of the X-Link recharge sequence.

Method #1: Stand-alone recharging




CONNECTING

- 1. First connect the Attachment to the X-Link using the thumbscrews
- 2. THEN connect the Attachment to the AC Adapter and to power

0. Required parts	1. Connect Attachment	2. Connect AC Adapter
		

DISCONNECTING

- 3. Disconnect the AC Adapter from the Attachment
- 4. THEN disconnect the Attachment from the X-Link





CHARGE FOR 4 HOURS	3. Disconnect AC Adapter	4. Disconnect Attachment
		

If you do not follow this procedure, your X-Link could malfunction and require a hardware reset.

Method #2: Mated recharging.

CONNECTING




9. FIRST wake up the X1 Dive Computer by taps or by wet finger contact.
If your software offers a menu for monitoring X-Link recharging, then enter that menu.
For V-Planner Live: X1 Settings -> Clocks, Calibrate -> CCR Calibrations
10. THEN connect the X-Link to the X1 Dive Computer using the thumbscrews.
11. THEN connect the Attachment to the X-Link by using thumb screws.
12. FINALLY, connect the Attachment to the AC Adapter and to power.

1. Wake Up X1	2. Connect X-Link to X1	3. Connect Attachment to X-Link
		
4. Connect Attachment to AC Adapter & power		
		

- Your X-Link should automatically start charging once the Attachment and AC Adapter are connected.
- If your software supports an X-Link recharge monitoring function, then the display will show a “charging status” – how it appears will depend on the 3rd party software you have installed on the X1 Dive Computer.
- Charging should take approximately 4 hours.

DISCONNECTING

13. Disconnect the AC Adapter from the Attachment
14. Disconnect the Attachment from the X-Link

CHARGE FOR 4 HOURS	5. Disconnect the AC Adapter	6. Disconnect the Attachment
		

If you do not follow this procedure, your X-Link could malfunction and require a hardware reset.

► USB COMMUNICATION WITH YOUR PC

*****WARNING:** You must **FIRST** install the USB Drivers on your computer, before you connect the X1 to the computer using the USB cable***

Overview

To connect your X1 with your computer, you must first install the USB X1 Driver from the Liquivision Quick Start CD. Once this process has been successfully completed, you can easily connect your PC to the X1 through the Multifunction Attachment and download your preferred software.

For instructions on how to download and/or install V-Planner Live [VPM-B], GAP X1 (Buhlmann-GF), or DecoSoft X1 (VPM-B/R and Buhlmann-GF) software on your X1, please refer to the software user manual of each respective 3rd party company.


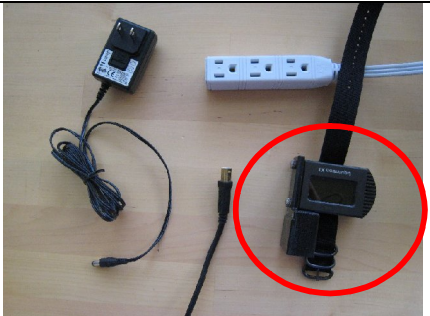
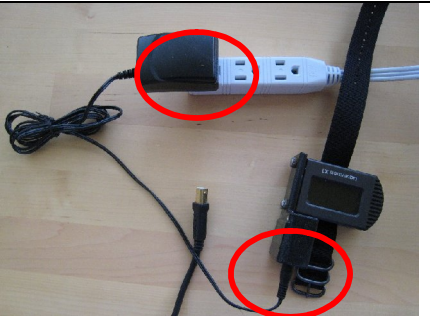
Websites V-Planner Live: <http://www.hhssoftware.com/v-planner-live/>
GAP Software: www.gap-software.com
DecoSoft X1: www.decosoftllc.com

Step 1: Make sure the USB cable is **NOT CONNECTED to your PC nor the X1 Multifunction Attachment.**

Step 2: Install “Liquivision X1 Multifunction Attachment Driver” from CD

1. Insert the Liquivision Quick Start CD into your computer’s CD Drive.
2. Double click on X1Driver.exe file or right click and select “Open.”
3. Confirm desired installation location. Default location is C:\Program Files\Liquivision. Click “Install.”
4. Driver installation will be confirmed. The X1 USB driver files will now be installed on your computer.

Step 3: Connect your X1 to your computer using the USB cable

		
1. Prepare all the cables...	2. FIRST connect the attachment to the X1 using the thumbscrews...	3. THEN connect to the AC adapter and to the power supply...

(continued on next page)

4. The X1 is now ready to connect to your PC. You can connect the attachment to your PC with the included USB cable as shown:



Step 4: Upload software to X1

Now you can download software to your PC from the internet, and upload it to your X1.

1. Download software from your preferred software vendor

V-Planner Live: <http://www.hhssoftware.com/v-planner-live/>

GAP Software: www.gap-software.com

DecoSoft X1: www.decosfotllc.com

2. Refer to the 3rd party software user manual for specific software upload instructions

Step 5: Disconnect X1 from Multifunction Attachment

1. To disconnect the attachment, follow the above procedure in reverse:

- a. Disconnect the USB cable
- b. Then unplug the AC Adapter cable
- c. Then unscrew the attachment from the X1

2. Never attempt to remove the attachment with the AC Adapter still connected to the wall power source.